

ABSTRACT

Problems associated with handling industrial automation control code created using graphical programming languages, principally the absence of any standard storage format or any user-readable one, are addressed by

- 5 providing methods and computer program products for storing industrial automation code generated using graphical programming languages in a format that permits human readability, is supported by available viewing technology (e.g., browsers), is easy and fast to parse, and that supports hierarchical information structures. The methods and computer program
- 10 products according to the invention involve converting a program written in a graphical programming language and stored during execution in computer memory in a non-standardized internal binary representation into a mark-up language format, for example, the extensible mark-up language ("XML"), storing, transmitting, receiving and inspecting the program stored in this
- 15 manner, and converting the stored program back into the graphical programming language internal representation.